[FIG.1]

BASEBAND AMPLITUDE MODULATION SIGNAL 101

102 HIGH-FREQUENCY POWER AMPLIFIER

PHASE MODULATION HIGH-FREQUENCY SIGNAL 103

5 TRANSMIT OUTPUT SIGNAL 104

105 POWER SUPPLY VOLTAGE CONTROL SECTION

[FIG.2] ·

122 QUANTIZER

10 123 LOW PASS FILTER

124 ATTENUATOR

125 COMPENSATOR

[FIG.3]

15 123 LOW PASS FILTER

124 ATTENUATOR

125 COMPENSATOR

126 POLYPHASE QUANTIZER

20 [FIG.4]

QUANTIZER (1)

. . .

QUANTIZER (N)

128 COMBINER

25

[FIG.5A]

COMBINER OUTPUT

[FIG.5B]

QUANTIZER (1) OUTPUT .

. . .

- 5 [FIG. 6]
 - 133 INTEGRATOR
 - 134 QUANTIZER
 - 135 LOW PASS FILTER
 - 136 ATTENUATOR
- 10 137 ATTENUATOR
 - 138 PHASE COMPENSATOR

[FIG.7]

BASEBAND AMPLITUDE MODULATION SIGNAL 101

- 15 200: POWER SUPPLY VOLTAGE CONTROL SECTION
 - 12 INTEGRATOR
 - 13 QUANTIZER
 - 14 LOW PASS FILTER
 - 15 COMPENSATOR
- 20 16 ATTENUATOR

BASEBAND MODULATION SIGNAL 100

- 3 AMPLITUDE/PHASE SEPARATION SECTION
- BASEBAND PHASE MODULATION SIGNAL 102
- 4 FREQUENCY SYNTHESIZER
- 25 PHASE MODULATION HIGH-FREQUENCY SIGNAL 103

DELTA SIGMA MODULATION SIGNAL S1

2 HIGH-FREQUENCY POWER AMPLIFIER

TRANSMIT OUTPUT SIGNAL S2

[FIG.8]

BASEBAND AMPLITUDE MODULATION SIGNAL 101

- 5 300: POWER SUPPLY VOLTAGE CONTROL SECTION
 - 12 INTEGRATOR
 - 13 QUANTIZER
 - 14 LOW PASS FILTER
 - 15 COMPENSATOR
- 10 16 ATTENUATOR

DELTA SIGMA MODULATION SIGNAL S3

[FIG.9]

BASEBAND AMPLITUDE MODULATION SIGNAL 101

- 15 400: POWER SUPPLY VOLTAGE CONTROL SECTION
 - 12 INTEGRATOR
 - 13 QUANTIZER
 - 14 LOW PASS FILTER
 - 15 COMPENSATOR
- 20 16 ATTENUATOR
 - 17 ENVELOPE DETECTOR

PHASE MODULATION HIGH-FREQUENCY SIGNAL 103

2 HIGH-FREQUENCY POWER AMPLIFIER

TRANSMIT OUTPUT SIGNAL S2

25

[FIG.10]

BASEBAND AMPLITUDE MODULATION SIGNAL 101

- 500: POWER SUPPLY VOLTAGE CONTROL SECTION
- 12 INTEGRATOR
- 13 QUANTIZER
- 14 LOW PASS FILTER
- 5 15 COMPENSATOR
 - 16 ATTENUATOR
 - 18 AD CONVERTER

PHASE MODULATION HIGH-FREQUENCY SIGNAL 103

- 2 HIGH-FREQUENCY POWER AMPLIFIER
- 10 TRANSMIT OUTPUT SIGNAL S2

[FIG.11]

BASEBAND AMPLITUDE MODULATION SIGNAL 101

600: POWER SUPPLY VOLTAGE CONTROL SECTION

- 15 12 INTEGRATOR
 - 19 POLYPHASE QUANTIZER
 - 14 LOW PASS FILTER
 - 15 COMPENSATOR
 - 16 ATTENUATOR
- 20 PHASE MODULATION HIGH-FREQUENCY SIGNAL 103
 - 2 HIGH-FREQUENCY POWER AMPLIFIER

TRANSMIT OUTPUT SIGNAL S2

[FIG.12]

25 BASEBAND AMPLITUDE MODULATION SIGNAL 101

FIXED VOLTAGE V_{fix}

MODULATION MODE SWITCHING CONTROL SIGNAL (AMPLITUDE

MODULATION PRESENCE/ABSENCE) S7

700 SELECTION CIRCUIT

200 (300, 400, 500, 600, 800) POWER SUPPLY VOLTAGE CONTROL SECTION

5 PHASE MODULATION HIGH-FREQUENCY SIGNAL 103
2 HIGH-FREQUENCY POWER AMPLIFIER
TRANSMIT OUTPUT SIGNAL S2

[FIG.13]

10 BASEBAND AMPLITUDE MODULATION SIGNAL 101

FIXED VOLTAGE V_{fix}

OPERATING MODE SWITCHING CONTROL SIGNAL (SWITCHING/LINEAR) S9

700 SELECTION CIRCUIT

15 200 (300, 400, 500, 600, 900) POWER SUPPLY VOLTAGE CONTROL SECTION

PHASE MODULATION HIGH-FREQUENCY SIGNAL 103

800 HIGH-FREQUENCY POWER AMPLIFIER (DUAL-MODE)

TRANSMIT OUTPUT SIGNAL S2

20

[FIG.14]

BASEBAND AMPLITUDE MODULATION SIGNAL 101
GAIN CONTROL SIGNAL S10

900: POWER SUPPLY VOLTAGE CONTROL SECTION

25 12 INTEGRATOR

901 VARIABLE-OUTPUT QUANTIZER

14 LOW PASS FILTER

- 15 COMPENSATOR
- 902 VARIABLE ATTENUATOR

PHASE MODULATION HIGH-FREQUENCY SIGNAL 103

- 2 HIGH-FREQUENCY POWER AMPLIFIER
- 5 TRANSMIT OUTPUT SIGNAL S2

[FIG.15]

BASEBAND AMPLITUDE MODULATION SIGNAL 101
GAIN CONTROL SIGNAL S10

- 10 900: POWER SUPPLY VOLTAGE CONTROL SECTION
 - 12 INTEGRATOR
 - 901: VARIABLE-OUTPUT QUANTIZER

POWER SUPPLY

- 903 QUANTIZER
- 15 904 SWITCH DRIVER
 - 906 POWER SUPPLY REGULATOR
 - 14 LOW PASS FILTER
 - 15 COMPENSATOR
 - 902 VARIABLE ATTENUATOR
- 20 PHASE MODULATION HIGH-FREQUENCY SIGNAL 103
 - 2 HIGH-FREQUENCY POWER AMPLIFIER

TRANSMIT OUTPUT SIGNAL S2